## 09980243 Page 1 09/27/2002

L20 ANSWER 5 OF 59 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER:

DOCUMENT NUMBER:

2000:841901 CAPLUS

133:362968

TITLE:

Synthesis of heterocyclic derivs. of

N-(phenylcyclohexylcarbonyl)phenylglycine amide for

treatment of cerebral ischemia or injury

INVENTOR(S):

Freund, Wolf-Dietrich; Lensky, Stephan; Muller,

Stephan Nicholas; Paulsen, Holger; Keldenich, Jorg;

Horvath, Ervin; Schuhmacher, Joachim

PATENT ASSIGNEE(S):

Bayer A.-G., Germany Ger. Offen., 30 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

GΙ

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT	NO.		KI	ND	DATE			A	PPLI	CATI	ON N	0.	DATE			
														1999			
WO														2000			
	W:	ΑE,	ΑG,	ΑL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,
														GH,			
														LR,			
		LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,
		SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,
						KG,											
	RW:													BE,			
		DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
						GN,											
BR	2000	01106	51	Α		2002	0305		B	R 20	00-13	1061		20000	0516		
EP	1185	516		A.	l	2002	0313		E	P 20	00-92	2528	8	20000	0516		
	R:							FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO										
ИО	2001	00581	LO	А		2002	0125		No	200	01-58	310		20013	1128		
PRIORITY	APP	LN. ]	NFO.	. :				1	DE 19	999-	19924	1818	Α	19990	529		
	•							V	VO 2	000-1	EP441	L7	W	20000	0516		
OTHER SO	URCE	(S):			MAR	PAT :	133:3	36296	58								

$$x^{1}$$
  $N$   $CH_{2}$   $N$   $X$   $CO$   $NH$   $CO$   $NH_{2}$   $CO$   $NH_{2}$ 

AΒ Title compds., e.g. I, were prepd. for use in treating ischemic brain diseases in humans or animals. Thus I [X = N, X1 = O] (II) was prepd. in

Ι

Examiner Anderson 703-605-1157

six steps, starting from 2,3-diaminopyridine, glycolic acid, (1R,2R)-2-(4-bromomethylphenyl) cyclohexane-1-carboxylic acid tert-Bu ester (prepn. given), and (S)-phenylglycinamide hydrochloride. Similarly prepd. was I [X = C, X1 = N(Me) (III)]. In in vivo (binding of calf cortex adenosine transport protein) compds. II and III had Ki = 2 nM. In in vitro tests of rat brain reperfusion injury, II and III were effective at 0.001 mg/kg, reducing infarct vol. 81-91% of control.

IT 307931-44-8P 307931-45-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of heterocyclic derivs. of N-(phenylcyclohexylcarbonyl)pheny lglycine amide for treatment of cerebral ischemia or injury)

RN 307931-44-8 CAPLUS

CN Cyclohexanecarboxylic acid, 2-[4-[[2-(4-morpholinylmethyl)-3H-imidazo[4,5-b]pyridin-3-yl]methyl]phenyl]-, 1,1-dimethylethyl ester, (1R,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 307931-45-9 CAPLUS

CN Cyclohexanecarboxylic acid, 2-[4-[[2-(4-morpholinylmethyl)-3H-imidazo[4,5-b]pyridin-3-yl]methyl]phenyl]-, (1R,2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 307931-46-0P 307931-47-1P 307931-62-0P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis of heterocyclic derivs. of N-(phenylcyclohexylcarbonyl)pheny lglycine amide for treatment of cerebral ischemia or injury)

RN 307931-46-0 CAPLUS

CN Benzeneacetamide, .alpha.~[[[(1R,2R)-2-[4-[[2-(4-morpholinylmethyl)-3H-imidazo[4,5-b]pyridin-3-yl]methyl]phenyl]cyclohexyl]carbonyl]amino]-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 307931-47-1 CAPLUS

CN Benzeneacetamide, .alpha.-[[[(1R,2R)-2-[4-[[2-(4-morpholinylmethyl)-3H-imidazo[4,5-b]pyridin-3-yl]methyl]phenyl]cyclohexyl]carbonyl]amino]-, monohydrochloride, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 307931-62-0 CAPLUS

CN Benzeneacetamide, .alpha.-[[[(1R,2R)-2-[4-[[2-[(2-hydroxyethoxy)methyl]-3H-imidazo[4,5-b]pyridin-3-yl]methyl]phenyl]cyclohexyl]carbonyl]amino]-, (.alpha.S)- (9CI) (CA INDEX NAME)

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L20 ANSWER 42 OF 59 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:94905 CAPLUS
                       122:56057
DOCUMENT NUMBER:
                       [(Imidazo[4,5-b]pyridinylmethyl)phenyl]cyclohexanecarb
TITLE:
                       oxylates as angiotensin antagonists
                       Mueller, Ulrich; Dressel, Juergen; Fey, Peter; Hanko,
INVENTOR(S):
                       Rudolf; Huebsch, Walter; Kraemer, Thomas;
                       Mueller-Gliemann, Matthias; Beuck, Martin; Kazda,
                       Stanislav; et al.
                       Bayer A.-G., Germany
PATENT ASSIGNEE(S):
                       Ger. Offen., 29 pp.
SOURCE:
                       CODEN: GWXXBX
DOCUMENT TYPE:
                       Patent
                       German
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                                      APPLICATION NO. DATE
                 KIND DATE
    PATENT NO.
                    ____
    _____
                                      DE 1993-4304455 19930215
AU 1994-54807 19940131
    DE 4304455
                   Al 19940818
                    A1
                        19940818
    AU 9454807
                    В2
    AU 672262
                          19960926
                                       EP 1994 101543 19940202
              Al
Bl
                          19940824
    EP 611767
    EP 611767
                          20000906
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                   AT 1994-101543 19940202
    AT 196141 E
                          20000915
    ES 2151908
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                          19950307
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                                                        19940208
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                                        CA 1994-2115536 19940211
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                    C1 19980927
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                    Α
    CN 1057085
CZ 289096
                    В
                          20001004
                                        CZ 1994-329
                                                        19940215
                    B6 20011114
                                      DE 1993-4304455 A 19930215
PRIORITY APPLN. INFO.:
                       MARPAT 122:56057
OTHER SOURCE(S):
     For diagram(s), see printed CA Issue.
GΙ
     The title compds., [(imidazolylmethyl)phenyl]cyclohexanecarboxylate
AΒ
     derivs. and [(pyrrolylmethyl)phenyl]cyclohexanecarboxylate derivs. I (A =
     H, aryl, etc.; B, D = substituent; BD = fused ring fragment; E = nitrogen,
     methine; L = H, halo, nitro, etc.; T = carboxy or amide function) were
     disclosed as agents for the treatment of arterial hypertonia and
     atherosclerosis. I are antihypertensives (angiotensin II antagonists).
     An example compd., the [(imidazo[4,5-b]pyridinylmethyl)phenyl]cyclohexanec
     arboxylate II was prepd.
     158098-06-7P 158098-07-8P 158098-19-2P
ΙT
     158098-20-5P 158098-21-6P
     RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);
     USES (Uses)
```

(prepn. of [[(imidazopyridinyl)methyl]phenyl]cyclohexanecarboxylates as

angiotensin antagonists)

RN 158098-06-7 CAPLUS

CN Cyclohexanecarboxylic acid, 2-[4-[(2-cyclopropyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-, 1,1-dimethylethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 158098-07-8 CAPLUS

CN Cyclohexanecarboxylic acid, 2-[4-[(2-cyclopropyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-, 1,1-dimethylethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 158098-19-2 CAPLUS

CN Cyclohexanecarboxylic acid, 2-[4-[(2-butyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-, 1,1-dimethylethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 158098-20-5 CAPLUS

CN Cyclohexanecarboxylic acid, 2-[4-[(2-phenyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-, 1,1-dimethylethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 158098-21-6 CAPLUS

CN Cyclohexanecarboxylic acid, 2-[4-[(6-bromo-2-butyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-, 1,1-dimethylethyl ester, trans- (9CI) (CAINDEX NAME)

Relative stereochemistry.

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ΙT
     158098-09-0P 158098-12-5P 158098-13-6P
     158098-15-8P 158098-16-9P 158098-17-0P
     158098-22-7P 158098-23-8P 158098-24-9P
     158098-25-0P 158098-26-1P 158098-28-3P
     158098-29-4P 158098-30-7P 158189-62-9P
     158189-63-0P 158189-64-1P 158189-65-2P
     158189-67-4P 158189-68-5P 159992-82-2P
     159992-83-3P 159992-84-4P 160227-10-1P
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (prepn. of [[(imidazopyridinyl)methyl]phenyl]cyclohexanecarboxylates as
        angiotensin antagonists)
RN
     158098-09-0 CAPLUS
     Cyclohexanecarboxylic acid, 2-[4-[(2-cyclopropyl-3H-imidazo[4,5-b]pyridin-
CN
```

3-yl)methyl]phenyl]-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 158098-12-5 CAPLUS

CN Cyclohexanecarboxylic acid, 2-[4-[(2-cyclopropyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 158098-13-6 CAPLUS

CN Cyclohexanecarboxylic acid, 2-[4-[(6-bromo-2-butyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 158098-15-8 CAPLUS

CN Cyclohexanecarboxylic acid, 2-[4-[(2-butyl-3H-imidazo[4,5-b)pyridin-3-yl)methyl]phenyl]-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Examiner Anderson 703-605-1157

RN 158098-16-9 CAPLUS

CN Cyclohexanecarboxylic acid, 2-[4-[(2-phenyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 158098-17-0 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-cyclopropyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-N-(2-hydroxy-1-phenylethyl)-, [1S-[1.alpha.(R\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 158098-22-7 CAPLUS

CN Benzeneacetamide, .alpha.-[[[2-[4-[(2-cyclopropyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]cyclohexyl]carbonyl]amino]-, [1.alpha.(R\*),2.beta.]-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 158098-23-8 CAPLUS

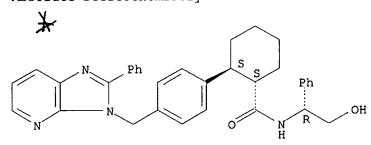
CN Cyclohexanecarboxamide, 2-[4-[(2-butyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-N-(2-hydroxy-1-phenylethyl)-, [1S-[1.alpha.(R\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 158098-24-9 CAPLUS

CN Cyclohexanecarboxamide, N-(2-hydroxy-1-phenylethyl)-2-[4-[(2-phenyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-, [1S-[1.alpha.(S\*),2.beta.]]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 158098-25-0 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-cyclopropyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-N-[1-(2-fluorophenyl)-2-hydroxyethyl]-, [1.alpha.(R\*),2.beta.]- (9CI) (CA INDEX NAME)

RN 158098-26-1 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(6-bromo-2-butyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]-N-(2-hydroxy-1-phenylethyl)-, [1S-[1.alpha.(S\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 158098-28-3 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-cyclopropyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-N-(2-hydroxy-1-phenylethyl)-, [1S-[1.alpha.(R\*),2.beta.]]- (9CI) (CA INDEX NAME)

RN 158098-29-4 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-cyclopropyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-N-(phenyl-2-pyridinylmethyl)-, [1S-[1.alpha.(R\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 158098-30-7 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-cyclopropyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-N-[(4-methylphenyl)sulfonyl]-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 158189-62-9 CAPLUS

CN Benzeneacetamide, .alpha.-[[[2-[4-[(2-cyclopropyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]cyclohexyl]carbonyl]amino]-, [1.alpha.(S\*),2.beta.]-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 158189-63-0 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-butyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]-N-(2-hydroxy-1-phenylethyl)-, [1R-[1.alpha.(S\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 158189-64-1 CAPLUS

CN Cyclohexanecarboxamide, N-(2-hydroxy-1-phenylethyl)-2-[4-[(2-phenyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-, [1R-[1.alpha.(R\*),2.beta.]]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 158189-65-2 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(6-bromo-2-butyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-N-(2-hydroxy-1-phenylethyl)-, [1R-

[1.alpha.(R\*), 2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 158189-67-4 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-cyclopropyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-N-(2-hydroxy-1-phenylethyl)-, [1R-[1.alpha.(S\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 158189-68-5 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-cyclopropyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-N-(phenyl-2-pyridinylmethyl)-, [1R-[1.alpha.(S\*),2.beta.]]- (9CI) (CA INDEX NAME)

RN 159992-82-2 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-cyclopropyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-N-(2-hydroxy-1-phenylethyl)-, [1R-[1.alpha.(S\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 159992-83-3 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-cyclopropyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-N-(2-hydroxy-1-phenylethyl)-, [1S-[1.alpha.(S\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 159992-84-4 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-cyclopropyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]-N-(2-hydroxy-1-phenylethyl)-, [1R-[1.alpha.(R\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160227-10-1 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-cyclopropyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-N-[1-(2-fluorophenyl)-2-hydroxyethyl]-, [1.alpha.(S\*),2.beta.]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L20 ANSWER 37 OF 59 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:567333 CAPLUS

DOCUMENT NUMBER: 125:221843

TITLE: Preparation of benzylimidazole derivatives for the

treatment of vascular restenosis

INVENTOR(S): Mueller-Gliemann, Matthias; Mueller, Ulrich; Beuck,

Martin; Zaiss, Siegfried; Gerdes, Christoph;

Domdey-Bette, Anke; Gruetzmann, Rudi; Lohmer, Stefan;

Wohlfeil, Stefan; et al.

PATENT ASSIGNEE(S): Bayer A.-G., Germany

SOURCE: Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	PATENT NO.		KIN	D DATE	DATE		APPLICATION NO.			DATE			
EP				19960807									
				DE, DK, ES,								PT,	SE
				19960808		DE	1995-1	.9503	160	1995020	1		
TW	44817	5	В	20010801		TW	1996-8	35100	684	1996012	2		
RO	11725	5	B1	20011228		RO	1996-1	.52		1996012	6		
CA	21683	17	AA	19960802		CA	1996-2	1683	17	1996012	9		
JP	082534	153	A2	19961001		JP	1996-3	3174		1996012	9		
IL	11693	l	A1	20000601		IL	1996-1	1693	1	1996012	9		
FI	960042	25	Α	19960802		FI	1996-4	25		1996013	0		
AU	964224	10	A1	19960808		ΑU	1996-4	2240		1996013	0		
AU	710235	5	B2	19990916									
NO	960043	L <b>4</b>	Α	19960802		NO	1996-4	14		1996013	1		
ZA	960072	25	Α	19960820		zA	1996-7	25		1996013	1		
RU	215826	51	C2	20001027		RU	1996-1	0180	0	1996013	1		
CN	113738	30	Α	19961211		CN	1996-1	0257	4	1996020	1		
US	593598	33	Α	19990810		US	1997-9	6007	5	1997102	4		
PRIORITY	APPLN	. INFO	.:		DE	199	5-1950	3160	Α	1995020	1		
					US	199	6-5884	77	В1	1996011	3		

OTHER SOURCE(S): MARPAT 125:221843

GΙ

AB The title compds. [I; D = CH, N; R1 = Ph, cycloalkyl, (un)branched alkyl; R2 = (un)branched alkoxycarbonyl, CH2OH, CONH2], useful for the treatment of vascular restenosis, are prepd. Thus, I (D = N, R1 = CHMe2, R2 = CONH2; \* \* cyclohexyl ring bonding is trans) was prepd. and demonstrated a IC50 of 0.01 nM for the inhibition of rat aorta smooth muscle proliferation.

RN 181130-31-4 CAPLUS

CN Cyclohexanecarboxamide, N-(2-hydroxy-1-phenylethyl)-2-[4-[[2-(1-methylethyl)-3H-imidazo[4,5-b]pyridin-3-yl]methyl]phenyl}-, [1S-[1.alpha.(R\*),2.beta.]]- (9CI) (CA INDEX NAME)

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Absolute stereochemistry.

RN 181130-33-6 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-ethyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-N-(2-hydroxy-1-phenylethyl)-, [1S-[1.alpha.(R\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 181130-39-2 CAPLUS

CN Benzeneacetamide, .alpha.-[[[2-[4-[[2-(1-methylethyl)-3H-imidazo[4,5-b]pyridin-3-yl]methyl]phenyl]cyclohexyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & O \\
 & C \\
 & N \\
 & C \\
 & O \\
 & D \\
 & O \\
 & Ph
\end{array}$$

RN 181130-40-5 CAPLUS

CN Benzeneacetamide, .alpha.-[[[2-[4-[(2-ethyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]cyclohexyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 181231-29-8 CAPLUS

CN Cyclohexanecarboxamide, N-(2-hydroxy-1-phenylethyl)-2-[4-[[2-(1-methylethyl)-3H-imidazo[4,5-b]pyridin-3-yl]methyl]phenyl]-, [1R-[1.alpha.(S\*),2.beta.]]- (9CI) (CA INDEX NAME)

RN 181231-31-2 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-ethyl-3H-imidazo[4,5-b]pyridin-3-yl)methyl]phenyl]-N-(2-hydroxy-1-phenylethyl)-, [1R-[1.alpha.(S\*),2.beta.]]- (9CI) (CA INDEX NAME)

## 09980243 Page 1 09/27/2002

L29 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1996:567333 CAPLUS

DOCUMENT NUMBER: 125:221843

TITLE: Preparation of benzylimidazole derivatives for the

treatment of vascular restenosis

INVENTOR(S): Mueller-Gliemann, Matthias; Mueller, Ulrich; Beuck,

Martin; Zaiss, Siegfried; Gerdes, Christoph;

Domdey-Bette, Anke; Gruetzmann, Rudi; Lohmer, Stefan;

ADDITION NO

חאתב

Wohlfeil, Stefan; et al.

PATENT ASSIGNEE(S):

Bayer A.-G., Germany Eur. Pat. Appl., 16 pp.

SOURCE: Eur. Pat. App. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

German

WIND DAME

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
EP				EP 1996-100760	
				R, GB, GR, IE, IT, LI,	
DE	19503160	A1		DE 1995-19503160	
TW	448176	В	20010801	TW 1996-85100684	19960122
RO	117256			RO 1996-152	
CA	2168317	AA	19960802	CA 1996-2168317	19960129
JP	08253453			JP 1996-33174	
IL	116931	A1	20000601	IL 1996-116931	19960129
FI	9600425	Α	19960802	FI 1996-425	19960130
AU	9642240	A1	19960808	AU 1996-42240	19960130
AU	710235	B2	19990916		
NO	9600414	Α	19960802	NO 1996-414	19960131
ZA	9600725	Α	19960820	ZA 1996-725	19960131
RU	2158261	C2	20001027	RU 1996-101800	19960131
CN	1137380	Α	19961211	CN 1996-102574	19960201
US	5935983	Α	19990810	US 1997-960075	19971024
PRIORITY	APPLN. INFO.	:		DE 1995-19503160 A	19950201
				US 1996-588477 B1	19960118

OTHER SOURCE(S):

MARPAT 125:221843

GΙ

AB The title compds. [I; D = CH, N; R1 = Ph, cycloalkyl, (un)branched alkyl; R2 = (un)branched alkoxycarbonyl, CH2OH, CONH2], useful for the treatment of vascular restenosis, are prepd. Thus, I (D = N, R1 = CHMe2, R2 = CONH2; \* \* cyclohexyl ring bonding is trans) was prepd. and demonstrated a IC50 of 0.01 nM for the inhibition of rat aorta smooth muscle proliferation.

IT 181130-30-3P 181130-32-5P 181130-34-7P 181130-35-8P 181130-36-9P 181130-37-0P 181130-38-1P 181130-41-6P 181130-42-7P 181231-28-7P 181231-30-1P 181231-32-3P 181231-33-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of benzylimidazole derivs. for the treatment of vascular restenosis)

RN 181130-30-3 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-cyclopropyl-1H-benzimidazol-1-yl)methyl]phenyl]-N-(2-hydroxy-1-phenylethyl)-, [1S-[1.alpha.(R\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 181130-32-5 CAPLUS

CN Cyclohexanecarboxamide, N-(2-hydroxy-1-phenylethyl)-2-[4-[[2-(1-methylethyl)-1H-benzimidazol-1-yl]methyl]phenyl]-, [1S-[1.alpha.(R\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Examiner Anderson 703-605-1157

RN 181130-34-7 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-ethyl-1H-benzimidazol-1-yl)methyl]phenyl]N-(2-hydroxy-1-phenylethyl)-, [1S-[1.alpha.(R\*),2.beta.]]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

RN 181130-35-8 CAPLUS

CN Cyclohexanecarboxamide, N-(2-hydroxy-1-phenylethyl)-2-[4-[(2-phenyl-1H-benzimidazol-1-yl)methyl]phenyl]-, [1S-[1.alpha.(R\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 181130-36-9 CAPLUS

CN Benzeneacetic acid, .alpha.-[[[2-[4-[[2-(1-methylethyl)-1H-benzimidazol-1-yl]methyl]phenyl]cyclohexyl]carbonyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

RN 181130-37-0 CAPLUS

CN Benzeneacetamide, .alpha.-[[[2-[4-[[2-(1-methylethyl)-1H-benzimidazol-1-yl]methyl]phenyl]cyclohexyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 181130-38-1 CAPLUS

CN Benzeneacetamide, .alpha.-[[[2-[4-[(2-cyclopropyl-1H-benzimidazol-1-yl)methyl]phenyl]cyclohexyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 181130-41-6 CAPLUS

CN Benzeneacetamide, .alpha.-[[[2-[4-[(2-ethyl-1H-benzimidazol-1-yl)methyl]phenyl]cyclohexyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 181130-42-7 CAPLUS

CN Benzeneacetamide, .alpha.-[[[2-[4-[(2-phenyl-1H-benzimidazol-1-yl)methyl]phenyl]cyclohexyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 181231-28-7 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-cyclopropyl-1H-benzimidazol-1-yl)methyl]-N-(2-hydroxy-1-phenylethyl)-, [1R-[1.alpha.(S\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 181231-30-1 CAPLUS

CN Cyclohexanecarboxamide, N-(2-hydroxy-1-phenylethyl)-2-[4-[[2-(1-methylethyl)-1H-benzimidazol-1-yl]methyl]phenyl]-, [1R-[1.alpha.(S\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 181231-32-3 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-ethyl-1H-benzimidazol-1-yl)methyl]phenyl]-N-(2-hydroxy-1-phenylethyl)-, [1R-[1.alpha.(S\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Examiner Anderson 703-605-1157

RN 181231-33-4 CAPLUS

CN Cyclohexanecarboxamide, N-(2-hydroxy-1-phenylethyl)-2-[4-[(2-phenyl-1H-benzimidazol-1-yl)methyl]phenyl]-, [1R-[1.alpha.(S\*),2.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 181130-43-8P 181130-44-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of benzylimidazole derivs. for the treatment of vascular restenosis)

RN 181130-43-8 CAPLUS

CN Cyclohexanecarboxylic acid, 2-[4-[[2-(1-methylethyl)-1H-benzimidazol-1-yl]methyl]phenyl]-, 1,1-dimethylethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 181130-44-9 CAPLUS

CN Cyclohexanecarboxylic acid, 2-[4-[[2-(1-methylethyl)-1H-benzimidazol-1yl]methyl]phenyl]-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L29 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:94905 CAPLUS

DOCUMENT NUMBER: 122:56057

TITLE: [(Imidazo[4,5-b]pyridinylmethyl)phenyl]cyclohexanecarb

oxylates as angiotensin antagonists

INVENTOR(S): Mueller, Ulrich; Dressel, Juergen; Fey, Peter; Hanko,

Rudolf; Huebsch, Walter; Kraemer, Thomas;

Mueller-Gliemann, Matthias; Beuck, Martin; Kazda,

Stanislav; et al.

Bayer A.-G., Germany Ger. Offen., 29 pp. PATENT ASSIGNEE(S): SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	rent no.		KIND	DATE		APPLICATION NO.	DATE			
	4304455 9454807		A1 A1	19940818 19940818		DE 1993-4304455	19930215			
	672262		B2	19960926		AU 1994-54807	19940131			
	611767		A1	19940824		EP 1994-101543	19940202			
EΡ	611767		B1	20000906						
	R: AT,	BE,	CH, DE	, DK, ES,	FR,	GB, GR, IE, IT, LI	, LU, MC,	NL,	PT,	SE
ΑT	196141		E	20000915		AT 1994-101543	19940202			
ES	2151908		Т3	20010116		ES 1994-101543	19940202			
US	5395840		Α	19950307		US 1994-193835	19940208			
CA	2115536		AA	19940816		CA 1994-2115536	19940211			
FI	9400659		Α	19940816		FI 1 <b>9</b> 94-659	19940211			
ΙĻ	108625		A1	19970930		IL 1994-108625	19940211			
PL	177834		В1	20000131		PL 1994-302213	19940211			

PRIORITY	APPLN. INFO.:			DE	1993-4304455 A	A.	19930215
CZ	289096	В6	20011114	1	CZ 1994-329		19940215
	1057085	В	20001004				
CN	1108257	Α	19950913		CN 1994-101553		19940215
RU	2119480	C1	19980927		RU 1994-4975		19940214
JP	06293741	A2	19941021		JP 1994-37543		19940214
ZA	9400984	Α	19940824		ZA 1994-984		19940214
ИО	9400506	Α	19940816		NO 1994-506		19940214

OTHER SOURCE(S):

MARPAT 122:56057

GI For diagram(s), see printed CA Issue.

AB The title compds., [(imidazolylmethyl)phenyl]cyclohexanecarboxylate derivs. and [(pyrrolylmethyl)phenyl]cyclohexanecarboxylate derivs. I (A = H, aryl, etc.; B, D = substituent; BD = fused ring fragment; E = nitrogen, methine; L = H, halo, nitro, etc.; T = carboxy or amide function) were disclosed as agents for the treatment of arterial hypertonia and atherosclerosis. I are antihypertensives (angiotensin II antagonists). An example compd., the [(imidazo[4,5-b]pyridinylmethyl)phenyl]cyclohexanec arboxylate II was prepd.

## IT 158098-08-9P

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of [[(imidazopyridinyl)methyl]phenyl]cyclohexanecarboxylates as
angiotensin antagonists)

RN 158098-08-9 CAPLUS

CN Cyclohexanecarboxylic acid, 2-[4-[(2-butyl-1H-benzimidazol-1-yl)methyl]phenyl]-, 1,1-dimethylethyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

## IT 158098-14-7P 158098-27-2P 158189-66-3P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of [[(imidazopyridinyl)methyl]phenyl]cyclohexanecarboxylates as
angiotensin antagonists)

RN 158098-14-7 CAPLUS

CN Cyclohexanecarboxylic acid, 2-[4-[(2-butyl-1H-benzimidazol-1-yl)methyl]phenyl]-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 158098-27-2 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-butyl-1H-benzimidazol-1-yl)methyl]phenyl]N-(2-hydroxy-1-phenylethyl)-, [1S-[1.alpha.(S\*),2.beta.]]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

RN 158189-66-3 CAPLUS

CN Cyclohexanecarboxamide, 2-[4-[(2-butyl-1H-benzimidazol-1-yl)methyl]phenyl]-N-(2-hydroxy-1-phenylethyl)-, [1R-[1.alpha.(R\*),2.beta.]]- (9CI) (CA INDEX NAME)